IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No. _____

Appellants:	Wolfgang HUBER
Application No.:	09/559,886
Group No.:	3729
Filed:	April 26, 2000
Examiner:	A. Dexter Tugbang
For:	A METHOD, APPARATUS AND SYSTEM FOR OPERATING AN AUTOMATIC COMPONENT MOUNTING UNIT FOR MOUNTING COMPONENTS ONTO A SUBSTRATE OF AN ELECTRICAL ASSEMBLY, INCLUDING MOUNTING MEMBERS WITH RESPECTIVE STORAGE DEVICES
Attorney Docket No.:	32860-000241/US

BRIEF ON APPEAL ON BEHALF OF APPELLANT
(Correct Version)

Commissioner for Patents
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BRIEF ON BEHALF OF APPELLANT

In support of the Notice of Appeal filed June 16, 2003, appealing the Examiner's final rejection mailed December 17, 2002 of each of pending claims 10-32 of the present application which appear in the attached Appendix, Appellant hereby provides the following remarks.

I. REAL PARTY IN INTEREST

The present application is assigned to Siemens Aktiengesellschaft of Munich, Germany, by an Assignment recorded on September 19, 2000, Reel 011106, Frame 0835.

II. RELATED APPEALS AND INTERFERENCES

The undersigned, the Assignee and the Appellant do not know of any appeals or interferences which would directly affect or which would be directly affected or have a bearing on the Board's decision in this Appeal.

III. STATUS OF THE CLAIMS

Claims 10-32 are reproduced in the attached Appendix A and are the claims on Appeal. Each of these claims is currently pending in the application. Original claims 1-9 of the application were canceled during the prosecution of the application without prejudice or disclaimer of the subject matter contained therein.

IV. STATUS OF AMENDMENTS

Amendments dated March 17, 2003 and May 5, 2003 were filed with the U.S. Patent Office in response to the Final Rejection dated December 17, 2002, and are under consideration at this time.

V. SUMMARY OF THE INVENTION

As pointed out, *inter alia*, on pages 1 and 3 of the specification, the invention is directed to a method, apparatus and system for operating an automatic electrical component mounting unit that can be readily adapted to mount a variety of different electrical components onto a variety of substrates by utilizing a number of different mounting unit members, such as a substrate camera, mounting head, and feeding member (see page 1). The invention helps eliminate a time-consuming calibration step subsequent to installation of a mounting unit member (see page 3 and Fig. 4).

As disclosed, *inter alia*, in Figures 1 and 2 of the specification, an automatic component mounting unit 7 is illustrated that operates to mount a number of components 2 onto a respective substrate 1 as the substrate 1 moves along a conveying or transport mechanism 10. The automatic component mounting unit 7 includes a component mounting feeding member 3 that supplies the component mounting unit 7 with a number of components 2 for mounting. In addition, the component mounting unit 7 includes a component mounting head member 5 that has a number of holding elements, such as, suction pipettes 4, for accepting an securely holding the components 2 which are supplied from the feeding unit 3. Once the component mounting head member 5 receives the components 2, the components can

then be transported to and placed onto a predetermined position of the substrate 1 (see page 5).

The automatic component mounting unit 7 includes a control device 6 for controlling the operation of the automatic mounting unit 7. For example, the control device 6 controls the movement of a second carriage 14 towards a first carriage 12 for the precise and controlled delivery, transport and placing of the component 2 onto the substrate 1 (see page 6).

As disclosed, *inter alia*, on page 7 of the specification, the component mounting head member 5 includes a respective head data storage device 15 that stores process data regarding the component mounting head member 5. The data is transmitted to and processed by the control device 6 via a wireless or hard wire communication. The head data storage device 15 can be integrated within the component mounting head member 5. In this way, the storage and processing of the component mounting head member process data can be transmitted in a contactless manner by a data processing unit, such as a transponder device. Alternatively, the mounting head process data can be stored and processed on a data storage medium, such as a floppy disk or other like storage medium. The stored data can then be inputted and processed by a floppy disk drive of the control device 6 via the floppy disk.

As further disclosed, *inter alia*, on page 7 of the specification, the component feeding member 3 of the automatic component mounting unit 7 also includes a respective feeding storage device 16. In addition, a substrate camera 17 includes its own substrate camera storage device 18.

The substrate camera 17, head member 5, and feeding member 3 storage devices contain characteristic data that relates to the substrate camera 17, the component mounting head member 5, and the component mounting feeding member 3, respectively (see page 7). As an example, geometrical or positioning data that has been obtained by measurements relative to a fixed reference and manufacturer identification codes of the different mounting members can be stored in the data storage device (see pages 3 and 4). This type of data may then be processed by the control device 6 for recognizing or identifying defective mounting members. Further, the data of each of these members of the automatic component mounting unit 7 can be readily transmitted to the control device 6 during the component mounting operation. The control device 6 utilizes the data for controlling the precise and controlled mounting of the components 2 onto the substrate 1 (see page 7).

VI. ISSUES

i. Whether or not claims 10, 12-24, 26, 29, and 30 are anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,402,564 to Tsukasaki et al.;

ii. Whether or not claims 11 and 25 are unpatentable under 35 U.S.C. § 103(a) by U.S. Patent No. 5,588,195 to Asai et al.;

iii. Whether or not claims 27, 28, 31, and 32 are unpatentable under 35 U.S.C. § 103(a) by U.S. Patent No. 5,402,564 to Tsukasaki et al. in view of U.S. Patent No. 5,588,195 to Asai et al., and further in view of U.S. Patent No. 6,002,650 to Kuribayashi et al.

VII. GROUPING OF THE CLAIMS

Appellant respectfully requests, for the purposes of this Appeal, that the grouping of the claims be as follows:

Group (i) including claims 10-14, and 16-18;

Group (ii) including claims 15, 19, 20, and 21; and

Group (iii) including claims 22-32.

8) ARGUMENTS

8a) The Rejections

The Examiner has rejected claims 10, 12-24, 26, 29, and 30 under 35 U.S.C. § 102(b) as being anticipated by Tsukasaki et al. (U.S. Patent No. 5,402,564). The Examiner has further rejected claims 11 and 25 under 35 U.S.C. § 103(a) as being unpatentable by Tsukasaki et al. in view of Asai, (U.S. Patent No. 5,588,195). Moreover, the Examiner has rejected claims 27, 28, 31, and 32 under 35 U.S.C. § 103(a) as being unpatentable by Tsukasaki et al. in view of the Asai et al., and further in view of Kuribayashi et al., (U.S. Patent No. 6,002,650).

8b) Teachings of the References

Tsukasaki et al. discloses a parts mounting sequence determination method which determines mounting sequence of M parts so that each of the total M parts is sequentially mounted on a board by a turret table mounter.

Referring to Figs. 1-3 and column 5, a mounting system 10 mainly comprises a part feeder 100 for selectively picking up and feeding one cassette among a plurality of

cassettes. A turret table mounter 200 picks up a part W that which is fed to a pickup position, conveying the part W to an insertion position, and inserting the part W into a printed circuit board 20 at the insertion position. The mounting system 10 further includes a clincher 300 for clinching the electronic part W that inserted it into the printed circuit board 20 by the turret table mounter 200. The mounting system 10 further include a printed circuit board positioner 400 for linearly moving the printed circuit board 20 along the x- and y-axes to set an angular position and a rotation posture of the part W at the insertion position with respect to the printed circuit board 20 and for rotating and driving the part W about a vertical axis. The part feeder 100 is capable of accommodating cassettes of ten different shapes for different size parts to be installed and a total of twenty cassettes at one time. A controller 500 is also disclosed.

Referring to Fig. 1, Fig. 6, and Col. 8, lines 30-68, the controller 500 mainly comprises an input portion 501, operation portion 502, storage portion 503, and output portion 504. An operator inputs, to the input portion 501, the data on the arrangement of the parts to be mounted on the printed board (the part arrangement table PT), the data indicating the correspondence of the part and the cassette number containing that part, and the data indicating the correspondence of each head which is accommodated by the turret table mounter 200 and the part to be held by the head. The input portion 501 is a switch, a key board, or the like of the controller 500. The above-described data is stored in the storage of the controller 500.

The operation portion 502 of the controller 500 determines the head arrangement table, the cassette arrangement table, and the mounting sequence order table. The determination is based on respective data set in the input portion 501. The head

arrangement table comprises the head number which is given to the head position in each turret portion, and the part number which specifies the part capable of being held by the head having that head number. The cassette arrangement table indicates the correspondence of each cassette position (Z) in the part feeder 100 and the cassette number. The sequence table indicated the mounting sequence of the turret table mounter 200.

Asai et al. discloses a transfer type circuit board fabricating system having a plurality of working modules 12, 14, 16, and 18 each including (a) a conveyor device 56, 300, 420 for transferring circuit boards in a predetermined transfer direction, (b) a working device 58, 302, 422 for performing a predetermined operation on the circuit boards, and (c) a controller 62, 306, 430 constituted principally by a computer, for controlling the working device. The system further has a coordinating control device 460 constituted principally by a computer, for controlling the controllers 62, 306, 430 of the working modules, on the basis of predetermined working schedule information stored therein, and status information which is received from the controllers of said working modules and which indicates operating states of the working modules (col. 3, lines 1-10).

The controller 62 for a first working module 12 is principally constituted by a computer 268 which incorporates a central processing unit (CPU) 260, a read-only memory (ROM) 262, a random-access memory (RAM) 264, and a bus 266 interconnecting those elements, as shown in the block diagram of FIG. 9 (Col. 18, lines 62-67).

Kuribayashi et al. discloses a method for forming mounting data. Kuribayashi discloses reading component text data corresponding to-be-mounted components of individual mounting positions stored in a component electronic catalog, according to mounting-position data. The mounting-position data includes mounting angles relating to the mounting positions formed on the to-be-mounted components. Component text data is related to shapes, dimensions, packing forms, colors the like, of components. The components text data is necessary for the mounting of components and is formed beforehand together with an image data of various kinds of components including components to be mounted. The components text data is stored in a storage medium 212 as a component electronic catalog (col. 18, lines 4-11). Any storage medium or storage device other than a CD-ROM is utilizable as the storage medium 212, including a flexible disk, an optical disk, etc. (col. 18, lines 53-63).

8c) Examiner's Rejections

The following summary of the Examiner's rejections is based on the Final Rejection of paper 18 unless otherwise noted.

The Examiner has rejected claims 10, 12-24, 26, 29, and 30 under 35 U.S.C. § 102(b) as being anticipated by Tsukasaki et al. (U.S. Patent No. 5,402,564).

With regard to claims 10 and 15, and 22, the Examiner alleges that Tsukasaki et al. disclose a plurality of mounting members disposed for mounting an electrical component, each of the mounting members 200 including a respective data storage device 503 wherein each of the data storage devices stores an amount of mounting process data related to a fixed reference mark. The Examiner further alleges in the

Advisory Action of paper 22 that the claimed "respective storage device" does not structurally distinguish over the storage devices 502, 503 of Tsukasaki et al. citing *In re Schreiber*, 128 F.3d 1473, 1477-78, 44USPQ2d 1429, 1431-32 (Fed Cir. 1997) and *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Still further, the Examiner alleges in the Advisory Action of paper 20 that Tsukaski et al. disclose more than one storage device and shows that operation portion 502 additionally acts as another storage device (see col. 8, lines 47-48), which works in conjunction with data storage device 503 and each of the respective mounting members. Moreover, the Examiner alleges in a note that the fixed reference mark can arbitrarily be fixed to any location on and apparatus including the apparatus itself) for each of the respective mounting members (see col. 8, lines 34-62). Moreover, the Examiner alleges in the Response to Arguments of paper 18 that the reference mark can arbitrarily be fixed to any location on an apparatus including the apparatus itself. The Examiner further alleges Tsukasaki et al. disclose a control device 500 disposed for controlling the automatic component-mounting unit, each of the data storage devices 503 transmitting the amount of mounting process data is utilized so as to adapt each of the mounting members 200 for optimal use during the mounting of the electrical component. Morevoer, the Examiner alleges in the Advisory Action of paper 22 that the storage devices 502, 503 (in Fig. 6) store information not only where components must be replaced, but also stores information of the head arrangement, i.e. mounting members, which allow optimal use of the positions of the head arrangement during mounting of the electrical components or parts. All of this information that is stored, the Examiner alleges, contributes to the mounting and position of the electrical components or parts.

The Examiner further alleges that this is clearly evident from the flowchart of Tsukasaki (in Fig. 6).

Regarding claims 12 and 23, the Examiner alleges Tsukasaki et al. teaches the mounting members include a mounting head member 217 including mounting members.

Regarding claim 13, the Examiner alleges Tsukasaki et al. teaches the mounting members include a mounting feeding member 100.

Regarding claim 14 and 24, the Examiner alleges Tsukasaki et al. teaches the mounting members including senor member 164 (See col. 7, lines 52-67).

Regarding claims 16-20, 29, and 30, the Examiner alleges Tsukasaki et al. teaches the control device receives the amount process data include at least one of geometrical and positioning data measured relative to a fixed reference mark and process data to configure movement and positioning of the plurality of mounting members (see Fig. 23). Moreover, the Examiner alleges in the Response to Arguments of paper 18 that the control device receives the amount process data that includes at least one of geometrical and positioning data measured relative to a fixed reference mark and process data to configure movement and position of the plurality of mounting members (see Figs. 20-23).

Regarding claim 26, the Examiner alleges the mounting process is transferred from a data storage medium 503.

The Examiner has further rejected claims 11 and 25 under 35 U.S.C. § 103(a) as being unpatentable by Tsukasaki et al. in view of Asai et al. (U.S. Patent No. 5,588,195).

The Examiner admits Tsukasaki et al. fails to teach data storage devices which include a transponder unit for communicating with a control device in a contactless manner, and the transponder is directly attached to the mounting member.

The Examiner alleges Asai et al. teach data storage devices which include a transponder unit 316 for communicating with a control device in a contactless manner, and the transponder is directly attached to the mounting member (see col. 26, lines 8-60) for the purpose of improving durability, which produces longer life expectancy for the system. Morevoer, the Examiner alleges in the Response to Arguments of paper 18 that the transmitting device performs the same functions of a transponder in col. 26, lines 8-60. The Examiner further alleges it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the invention of Tsukasaki et al. with a transponder unit for communicating with the control device in a contactless manner, in light of the teaching of Asai et al., in order to improve durability, which produces longer life expectancy for the system.

Moreover, the Examiner has rejected claims 27, 28, 31, and 32 under 35 U.S.C. § 103(a) as being unpatentable by Tsukasaki et al. in view of Asai et al. and further in view of Kuribayashi et al. (U.S. Patent No. 6,002,650).

Regarding claims 27 and 28, the Examiner alleges Tsukasaki et al. and Asai et al. teach the mounting process data stored on data storage medium (i.e. computer) but fails to teach insertable into at least one of the mounting head members and control device. The Examiner alleges Kuribayashi teaches using a data storage medium; insertable into the control device (col. 18, lines 53-61) for the purpose of reducing the formation of the mounting data incorporating the characterstics of the mounter can be

conveniently achieved with the mounter itself. The Examiner alleges that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the invention of Tsukasaki et al., in light of the teaching of Asai et al., with a data storage medium; insertable into the control device for the purpose of reducing the formation of the mounting data incorporating the characteristics of the mounter can be conveniently achieved with the mounter itself.

Regarding claims 31 and 32, the Examiner alleges Tsukasaki et al. teach the control device receives the amount process data include at least one of geometrical and positioning data measured relative to a fixed reference mark and process data to configure movement and positioning of the plurality of mounting members (see Fig. 23).

8d) General Reasons supporting the Allowability of Group I

Including claims 10-14, and 16-18

The Examiner alleges that, in col. 8, lines 34-62, Tsukasaki et al. discloses a plurality of mounting members each including a storage device. However, Applicants respectfully note that the storage device 503 (and/or, as alleged by the Examiner, operation portion 502 working with the storage device 503) according to Tsukasaki et al., is not a storage device of the mounting members 200, but is a storage device of the controller 500 acting as a general storage portion to store information regarding where components have to be placed and to control placement of the components. This is clearly contrary to the present invention as claimed, as will be explained as follows.

With regard to claim 10 of the present application, for example, the claim sets forth an automatic component mounting unit comprising a plurality of mounting

members "each of said mounting members including a respective data storage device associated therewith". Tsukasaki et al., on the other hand, has only a centralized storage device or devices that are not included as part of the mounting members. Applicants have not claimed a general storage device or devices used in conjunction with all mounting members as in Tsukasaki et al., but instead, have claimed mounting members, each including a respected data storage devie.

Further, as additionally set forth in claim 10, each of the data storage devices transmits an amount of mounting process data, wherein the mounting process data "is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component". Thus, not only does each mounting member include a storage device associated therewith, but the storage device stores information which adapts the mounting member for optimal use during mounting of electrical components. As such, it is possible to interchange any mounting member, which can be a mounting head, feeding member, sensor, etc., without the need of calibrating the whole mounting apparatus. This is further discussed on page 3 of the original application.

Applicants respectfully submit that Tsukasaki et al. fails to teach or suggest a plurality of mounting members, "each of said mounting members including a respective data storage device" as set forth in claim 10, as well as each of the data storage devices transmitting an amount of mounting process data, wherein "said amount of mounting process data is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component". Tsukasaki et al. is merely directed to controlling the mounting members, and does not include mounting

members with separate storage devices, which can essentially be interchanged and reset for optimal use, without the need to calibrate the whole apparatus. Thus, in addition to the arguments previously set forth, Applicants respectfully submit that claim 10 of the present application is patentable over Tsukasaki et al.

Accordingly, Applicants respectfully submit that independent claim 10 of the present application is clearly allowable over Tsukasaki et al. Accordingly, withdrawal of the Examiner's rejection is respectfully requested.

As discussed above, Tsukasaki et al. fail to disclose a plurality of mounting members, "each of said mounting members including a respective data storage device" as well as each of the data storage devices transmitting an amount of mounting process data, wherein "said amount of mounting process data is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component". Even assuming *arguendo* that either one or both of Asai et al. or Kuribayashi et al. could be combined with Tsukasaki et al., which Applicants do not admit, each of the aforementioned references would still fail to make up for the aforementioned deficiencies of Tsukasaki et al.

Accordingly, with regard to claims 11-14 and 16-18, Applicants respectfully submit that claims 11-14 and 16-18, depend from independent claim 10, and are therefore allowable for reasons previously presented therewith. Therefore, it is respectfully submitted that the claims are unobvious from the prior art and it is respectfully requested that their respective rejections be reversed.

8f) Further Reas ns Supporting the Allowability of Group II Including Claims 15 and 19-21

Finally, with regard to claim 15, this claim also claims a plurality of mounting members, "each of said members includes a respective data storage device for storing an amount of process data", wherein said control device utilizes "said amount of process data so as to readily adapt each of said mounting members for optimal use upon installation of each of said mounting members to said automatic component mounting unit". Accordingly, at least such limitations are not taught or suggested by Tsukasaki et al.

As discussed above, Tsukasaki et al. fail to disclose a plurality of mounting members, "each of said mounting members including a respective data storage device" as well as each of the data storage devices transmitting an amount of mounting process data, wherein "said amount of mounting process data is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component". Even assuming *arguendo* that either one or both of Asia or Kuribayashi et al. could be combined with Tsukasaki et al., which Applicants do not admit, each of the aforementioned references would still fail to make up for the aforementioned deficiencies of Tsukasaki et al.

Accordingly, with regard to claims 19-21, Applicants respectfully submit that claims 19-21, depend from independent claim 15, and are therefore allowable for reasons previously presented therewith. Therefore, it is respectfully submitted that the claims are unobvious from the prior art and it is respectfully requested that their respective rejections be reversed.

8h) Further Reasons Supporting the Allowability of Group III Including Claims 22-32

With regard to claim 22, Applicants note that claim 22 has been amended to clarify that each of the mounting members include a respective data storage device, and to clarify that mounting process data is adapted to be stored in the data storage devices and is utilized to adapt each of the mounting members for optimal use during the mounting of an electrical component, somewhat similar to that of claim 10. Accordingly, claim 22 is also allowable over Tsukasaki et al.

As discussed above, Tsukasaki et al. fail to disclose a plurality of mounting members, "each of said mounting members including a respective data storage device" as well as each of the data storage devices transmitting an amount of mounting process data, wherein "said amount of mounting process data is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component". Even assuming *arguendo* that either one or both of Asia or Kuribayashi et al. could be combined with Tsukasaki et al., which Applicants do not admit, each of the aforementioned references would still fail to make up for the aforementioned deficiencies of Tsukasaki et al.

Accordingly, with regard to claims 23-30, Applicants respectfully submit that claims 23-30, depend from independent claim 22, and are therefore allowable for reasons previously presented therewith. Therefore, it is respectfully submitted that the claims are unobvious from the prior art and it is respectfully requested that their respective rejections be reversed.

IX. CONCLUSION

It is respectfully submitted that the rejections of each of pending claims 10-14 and 16-18 under 35 U.S.C. § 102 as being anticipated by Tsukasaki et al. is in error and should be reversed. Further it is respectfully submitted that the rejections of each of pending claims 15-32 as being unpatentable over Tsukasaki et al in view of Asai et al., or in view of the aforementioned combination and further in view of Kuribayashi et al., is in error and should be reversed. At best, the Examiner has found bits and pieces of Appellants' invention and has randomly combined various teachings of prior art references without proper motivation and based solely upon Appellants' own disclosure. Accordingly, for at least the aforementioned reasons, Appellants respectfully request the Honorable Members of the Board of Patent Appeals and Interferences to reverse each of the outstanding rejections in connection with the present application and allow each of claims 10-32 to be allowed in connection with the present application.

This Appeal Brief is being presented in triplicate.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-

0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Enclosures: Three (3) copies of Appellant's Brief
Appendix -- Clean version of pending claims

APPENDIX

10. An automatic component mounting unit for mounting an electrical component onto a substrate of an electrical assembly, comprising:

a plurality of mounting members disposed for mounting said electrical component, each of said mounting members including a respective data storage device, wherein each of said data storage devices stores an amount of mounting process data related to a fixed reference mark, for each of said respective mounting members; and

a control device disposed for controlling said automatic component mounting unit, each of said data storage devices transmitting said amount of mounting process data to said control device, wherein said amount of mounting process data is utilized so as to adapt each of said mounting members for optimal use during said mounting of said electrical component.

11. An automatic component mounting unit according to claim 10 wherein each of said data storage devices includes a transponder unit for communicating with said control device in a contactless manner, and wherein said transponder unit is directly attached to each of said mounting members.

12. An automatic mounting unit according to claim 10 wherein said mounting members include a mounting head member.

13. An automatic mounting unit according to claim 10 wherein said mounting members include a mounting feeding member.

14. An automatic mounting unit according to claim 10 wherein said mounting members include a mounting sensor member.

15. A system for operating an automatic component mounting unit for mounting an electrical component onto a substrate of an electrical assembly, comprising:

a plurality of mounting members installed for mounting said electrical component, wherein each of said members includes a respective data storage device for storing an amount of process data related to a fixed reference mark; and

a control device disposed for communicating with each of said data storage devices for processing said amount of process data, wherein said control device utilizes said amount of process data so as to readily adapt each of said mounting members for optimal use upon installation of each of said mounting members to said automatic component mounting unit.

16. An automatic component mounting unit according to claim 10, wherein the mounting process data includes at least one of geometrical and positioning data measured relative to a fixed reference mark.

17. An automatic component mounting unit according to claim 10, wherein said control device receives said amount of mounting process data to configure movement and positioning of the plurality of mounting members.

18. An automatic component mounting unit according to claim 16, wherein said control device receives said amount of mounting process data to configure movement and positioning of the plurality of mounting members.

19. A system as claimed in claim 15, wherein said amount of process data includes at least one of geometrical and positioning data measured relative to a fixed reference mark.

20. A system as claimed in claim 15, wherein said control device receives said amount of process data to configure movement and positioning of the plurality of mounting members.

21. A system as claimed in claim 19, wherein said control device receives said amount of process data to configure movement and positioning of the plurality of mounting members.

22. An automatic component mounting unit for mounting an electrical component onto a substrate, comprising:

a plurality of mounting members disposed for mounting an electrical component, wherein each of said mounting members includes a respective data storage device, adapted to store mounting process data related to a fixed reference mark; and

a control device, adapted to control said plurality of mounting members, wherein the mounting process data is utilized by the control device so as to adapt each

of the mounting members for optical use during the mounting of an electrical component.

23. The automatic component mounting unit of claim 22, further comprising a mounting head member, including the plurality of mounting members.

24. The automatic component mounting unit of claim 23, wherein the mounting head member includes a storage device for storing the mounting process data.

25. The automatic component mounting unit of claim 24, wherein the storage device is a transponder, adapted to communicate with the control device in a contactless manner.

26. The automatic component mounting unit of claim 22, wherein the mounting process data is transferred from a data storage medium.

27. The automatic component mounting unit of claim 23, wherein the mounting process data is stored on a data storage medium, insertable into at least one of the mounting head member and control device.

28. The automatic component mounting unit of claim 22, wherein the mounting process data is stored on a data storage medium, insertable into the control device.

29. An automatic component mounting unit according to claim 22, wherein the mounting process data includes at least one of geometrical and positioning data measured relative to a fixed reference mark.

30. An automatic component mounting unit according to claim 22, wherein said control device receives said amount of mounting process data to configure movement and positioning of the plurality of mounting members.

31. An automatic component mounting unit according to claim 27, wherein the mounting process data includes at least one of geometrical and positioning data measured relative to a fixed reference mark.

32. An automatic component mounting unit according to claim 27, wherein said control device receives said amount of mounting process data to configure movement and positioning of the plurality of mounting members.